

GN, ML, MR, NE, SN, TD, TG

AU 9745703	A1	19990503	AU 1997-45703	19971010
CA 2312008	AA	19990422	CA 1998-2312008	19981008
WO 9919498	A1	19990422	WO 1998-IL487	19981008

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9894572	A1	19990503	AU 1998-94572	19981008
EP 1021552	A1	20000726	EP 1998-947760	19981008

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

```
=> logoff y
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                                ENTRY      SESSION
FULL ESTIMATED COST          75.68      75.89

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)  SINCE FILE      TOTAL
                                                ENTRY      SESSION
CA SUBSCRIBER PRICE          -3.10      -3.10
```

STN INTERNATIONAL LOGOFF AT 14:11:00 ON 30 NOV 2002

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptal649axm

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Apr 08	"Ask CAS" for self-help around the clock
NEWS 3	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 4	Apr 09	ZDB will be removed from STN
NEWS 5	Apr 19	US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 6	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7	Apr 22	BIOSIS Gene Names now available in TOXCENTER
NEWS 8	Apr 22	Federal Research in Progress (FEDRIP) now available
NEWS 9	Jun 03	New e-mail delivery for search results now available
NEWS 10	Jun 10	MEDLINE Reload
NEWS 11	Jun 10	PCTFULL has been reloaded
NEWS 12	Jul 02	FOREGE no longer contains STANDARDS file segment
NEWS 13	Jul 22	USAN to be reloaded July 28, 2002; saved answer sets no longer valid
NEWS 14	Jul 29	Enhanced polymer searching in REGISTRY
NEWS 15	Jul 30	NETFIRST to be removed from STN
NEWS 16	Aug 08	CANCERLIT reload
NEWS 17	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18	Aug 08	NTIS has been reloaded and enhanced

NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
now available on STN

NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded

NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded

NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced

NEWS 23 Sep 03 JAPIO has been reloaded and enhanced

NEWS 24 Sep 16 Experimental properties added to the REGISTRY file

NEWS 25 Sep 16 Indexing added to some pre-1967 records in CA/CAPLUS

NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA

NEWS 27 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985

NEWS 28 Oct 21 EVENTLINE has been reloaded

NEWS 29 Oct 24 BEILSTEIN adds new search fields

NEWS 30 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN

NEWS 31 Oct 25 MEDLINE SDI run of October 8, 2002

NEWS 32 Nov 18 DKILIT has been renamed APOLLIT

NEWS 33 Nov 25 More calculated properties added to REGISTRY

NEWS 34 Dec 02 TIBKAT will be removed from STN

NEWS 35 Dec 04 CSA files on STN

NEWS 36 Dec 17 PCTFULL now covers WP/PCT Applications from 1978 to date

NEWS 37 Dec 17 TOXCENTER enhanced with additional content

NEWS 38 Dec 17 Adis Clinical Trials Insight now available on STN

NEWS EXPRESS October 14 CURRENT WINDOWS VERSION IS V6.01,
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002

NEWS HOURS STN Operating Hours Plus Help Desk Availability

NEWS INTER General Internet Information

NEWS LOGIN Welcome Banner and News Items

NEWS PHONE Direct Dial and Telecommunication Network Access to STN

NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 15:27:35 ON 27 DEC 2002

=> s antibody and plant

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> file agricola

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'AGRICOLA' ENTERED AT 15:27:51 ON 27 DEC 2002

FILE COVERS 1970 TO 11 Dec 2002 (20021211/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s (antibody or antibodies) and plant

12448 ANTIBODY

16620 ANTIBODIES

271731 PLANT

L1 2091 (ANTIBODY OR ANTIBODIES) AND PLANT

=> s l1 and immunoglobulin

2431 IMMUNOGLOBULIN

L2 43 L1 AND IMMUNOGLOBULIN

=> s l2 and transgneic

0 TRANSGNEIC

L3 0 L2 AND TRANSGNEIC

=> s l2 and transgenic

10839 TRANSGENIC

L4 16 L2 AND TRANSGENIC

=> dup rem l4

PROCESSING COMPLETED FOR L4

L5 16 DUP REM L4 (0 DUPLICATES REMOVED)

=> d 11-16 ti

L5 ANSWER 11 OF 16 AGRICOLA

TI Expression of engineered **antibodies** in **plant** cells.

L5 ANSWER 12 OF 16 AGRICOLA

TI Characteristics and applications of **antibodies** produced in plants.

L5 ANSWER 13 OF 16 AGRICOLA

TI Assembly of multimeric proteins in **plant** cells: characterisitics and uses of **plant**-derived **antibodies**.

L5 ANSWER 14 OF 16 AGRICOLA

TI Assembly of anitbodies and mutagenized variants in **transgenic** plants and **plant** cell cultures.

L5 ANSWER 15 OF 16 AGRICOLA

TI 'Phytoantibodies': a general vector for the expression of **immunoglobulin** domains in **transgenic** plants.

L5 ANSWER 16 OF 16 AGRICOLA

TI Synthesis and self-assembly of a functional monoclonal **antibody** in **transgenic** Nicotiana tabacum.

=> d 12 so

L5 ANSWER 12 OF 16 AGRICOLA

S0 Current plant science and biotechnology in agriculture, 1993. Vol. 14 p. 549-560

Publisher: Dordrecht : Kluwer Academic Publishers.

ISSN: 0924-1949

=> d 11 so

L5 ANSWER 11 OF 16 AGRICOLA
SO Plant molecular biology, Nov 1994. Vol. 26, No. 4. p. 1023-1030
Publisher: Dordrecht : Kluwer Academic Publishers.
CODEN: PMBIDB; ISSN: 0167-4412

=> d 11 ab

L5 ANSWER 11 OF 16 AGRICOLA

=> d 16 ab

L5 ANSWER 16 OF 16 AGRICOLA
AB **Immunoglobulin** light and heavy chains are synthesized in mammalian cells as precursors containing a signal peptide. Processing and assembling result in formation of active **antibodies**. Chimeric genes have been made containing the coding sequence of the barley alpha-amylase signal peptide which has been fused to cDNAs coding for either the mature light or the mature heavy chain of a monoclonal **antibody**. A plasmid was constructed linking both chimeric genes under the control of **plant** active promoters in an expression cassette. This DNA fragment was stably integrated into the genome of *Nicotiana tabacum* by *Agrobacterium tumefaciens* mediated gene transfer. Synthesis of light and heavy chains and assembly to **antibodies** was detected in **transgenic** tobacco tissue using specific secondary **antibodies**. By electron microscopic immunogold labeling, the presence of assembled **antibody** could be detected within the endoplasmic reticulum. Affinity chromatography indicated biological activity of the assembled **immunoglobulin** produced in **plant** cells. Unexpectedly, a significant amount of assembled **antibodies** was found within chloroplasts.

=> d 5-10 ti

L5 ANSWER 5 OF 16 AGRICOLA
TI Transient expression of a tumor-specific single-chain fragment and a chimeric **antibody** in tobacco leaves.

L5 ANSWER 6 OF 16 AGRICOLA
TI Rapid production of specific vaccines for lymphoma by expression of the tumor-derived single-chain Fv epitopes in tobacco plants.

L5 ANSWER 7 OF 16 AGRICOLA
TI Seed-specific immunomodulation of abscisic acid activity induces a developmental switch.

L5 ANSWER 8 OF 16 AGRICOLA
TI Generation and assembly of secretory **antibodies** in plants.

L5 ANSWER 9 OF 16 AGRICOLA
TI Immunotherapeutic potential of **antibodies** produced in plants.

L5 ANSWER 10 OF 16 AGRICOLA
TI **Plant antibodies** for immunotherapy.

=> d 10 so

L5 ANSWER 10 OF 16 AGRICOLA
SO Plant physiology, Oct 1995. Vol. 109, No. 2. p. 341-346
Publisher: Rockville, MD : American Society of Plant Physiologists, 1926-
CODEN: PLPHAY; ISSN: 0032-0889

=> d 10 ab

L5 ANSWER 10 OF 16 AGRICOLA

=> d 9 ab

L5 ANSWER 9 OF 16 AGRICOLA

AB Plants are capable of synthesizing and assembling virtually every kind of **antibody** molecule, ranging from the smallest antigen-binding domains and fragments, to full length, and even multimeric, **antibodies**. A number of **plant** hosts can be used, and because this is a versatile expression system that can be scaled-up to agricultural proportions, a cheap and plentiful supply of **antibodies** could be made available. Immunotherapy is one of many potential uses for bulk quantities of **antibody**. In particular, passive immunotherapy of mucosal surfaces may be possible, because functional secretory **antibodies** can be engineered in plants.

=> d 8 ab

L5 ANSWER 8 OF 16 AGRICOLA

AB Four **transgenic** *Nicotiana tabacum* plants were generated that expressed a murine monoclonal **antibody** kappa chain, a hybrid **immunoglobulin** A-G heavy chain, a murine joining chain, and a rabbit secretory component, respectively. Successive sexual crosses between these plants and filial recombinants resulted in plants that expressed all four protein chains simultaneously. These chains were assembled into a functional, high molecular weight secretory **immunoglobulin** that recognized the native streptococcal antigen I/II cell surface adhesion molecule. In plants, single cells are able to assemble secretory **antibodies**, whereas two different cell types are required in mammals. **Transgenic** plants may be suitable for large-scale production of recombinant secretory **immunoglobulin** A for passive mucosal immunotherapy. **Plant** cells also possess the requisite mechanisms for assembly and expression of other complex recombinant protein molecules.

=> d 6 so

L5 ANSWER 6 OF 16 AGRICOLA

SO Proceedings of the National Academy of Sciences of the United States of America, Jan 19, 1999. Vol. 96, No. 2. p. 703-708
Publisher: Washington, D.C. : National Academy of Sciences,
CODEN: PNASA6; ISSN: 0027-8424

=> d 10 ab

L5 ANSWER 10 OF 16 AGRICOLA

=> s plant and secrete

271731 PLANT

432 SECRETE

L6 92 PLANT AND SECRETE

=> s 16 and transgenic

10839 TRANSGENIC

L7 5 L6 AND TRANSGENIC